

## **Historic, Archive Document**

Do not assume content reflects current scientific knowledge, policies, or practices.





# U.S. Department of Agriculture **PESTICIDE DATA PROGRAM** Progress Report

February 1998

Although the U.S. food supply is one of the safest in the world, public concern still exists about the effects of agricultural pesticides on human health and environmental quality. Chemical residues on food have been of particular interest. Recognizing the need to improve the quality and quantity of information available on chemical residues, the U.S. Department of Agriculture (USDA) proposed the Pesticide Data Program (PDP) as part of its fiscal year 1991 budget. Program operations began in May 1991. PDP provides data on actual pesticide dietary exposure, food consumption, and pesticide usage, which help form the basis to conduct realistic dietary risk assessments and in evaluating pesticide tolerances. PDP is now a critical component of the Food Quality Protection Act (FQPA) of 1996. Title III of the Act directs the Secretary of Agriculture to provide improved pesticide residue data collection, including guidelines for the use of comparable analytical and standardized reporting methods and increased sampling for foods most highly consumed by infants and children.

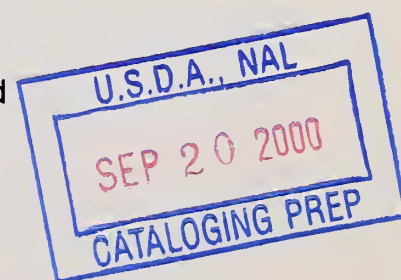
PDP supports the Environmental Protection Agency's (EPA) risk assessment process in the reregistration of pesticides vital to American agriculture in sustaining a safe and abundant food supply. Other Government agencies use the data to respond more quickly and effectively to food safety issues. These data have also been used by USDA's Foreign Agricultural Service, State agencies, and grower groups to support the export of U.S. commodities in a competitive expanding global environment. PDP data are also used to examine pesticide residue issues which may affect good agricultural practices related to integrated pest management practices. PDP continues to amend the commodities and pesticides tested to further meet EPA's data needs and respond more fully to the 1993 National Academy of Sciences (NAS) report "Pesticides in the Diets of Infants and Children."

Coordination of PDP is multi-departmental with planning, policy, and procedural efforts conducted by USDA, EPA, and the Food and Drug Administration (FDA). USDA signed a Memorandum of Understanding with EPA and FDA to provide oversight and direction for PDP through an Executive Steering Committee.

- USDA**
  - Collects data on agricultural chemical usage;
  - Collects pesticide residue data through cooperation with 10 participating States;
  - Provides EPA and FDA with data on food consumption;
  - Produces residue and usage data for EPA, FDA, and the public; and
  - Provides pesticide alternative practices.
- EPA**
  - Coordinates with USDA on data collection for commodities and pesticides;
  - Receives pesticide residue, food consumption, and usage data from USDA, FDA, and State and private sources to support the pesticide reregistration process; and
  - Conducts dietary risk assessments.
- FDA**
  - Shares residue data-recording information, commodity coding systems, and commodity preparation information with USDA;
  - Collects residue data to enforce EPA established tolerances and FDA administrative guidelines for food; and conducts total diet surveys.

## ■ **USDA Structure**

The four USDA agencies involved in PDP activities are the Agricultural Marketing Service (AMS), the Agricultural Research Service (ARS), the Economic Research Service (ERS), and the National Agricultural Statistics Service (NASS). AMS was selected as the lead agency to coordinate, implement, and manage the various facets of the program.





- 
- AMS**
    - Coordinates PDP activities of USDA agencies and cooperating State agencies;
    - Manages pesticide residue sampling and testing procedures;
    - Designs and maintains an automated information system for pesticide residue data; and
    - Publishes annual summaries of residue detections.
  - ARS**
    - Conducts nationwide surveys of food intake by individuals; and
    - Translates data on foods as consumed into forms linked to pesticide residue data.
  - ERS**
    - Analyzes NASS and AMS data to determine the impact various regulations and production practices might have on U.S. agricultural production, the Nation's food supply, and consumers; and
    - Assesses the economic implications of alternative pest control policies and practices on producers, marketers, and consumers.
  - NASS**
    - Conducts annual statistically reliable surveys of fruit and vegetable producers on fertilizer and pesticide use, relating to pest management and economic practices; and
    - Publishes annual State-level data on the results of the chemical use surveys, including percent of area receiving fertilizer and pesticides and total amounts applied.

## Program Status

### AMS

AMS has published pesticide residue summaries for 1991 through 1996. PDP pesticide monitoring activities are a Federal-State partnership where the 10 participating States, California, Colorado, Florida, Maryland (replacing North Carolina-Jan. 1997 ), Michigan, New York, Ohio, Texas, Washington, and Wisconsin, provide support services in collection and testing of commodities for pesticides using uniform national standard operating procedures (SOPs). Together, these States and States in their direct marketing network represent more than half the Nation's population, major agricultural States, and all regions of the country. This provides the basis for PDP's statistically reliable sampling rationale in projecting national estimates from the residue data. AMS also signed an agreement with USDA's Grain Inspection, Packers and Stockyards Administration (GIPSA) to collect and analyze grains.

PDP samples are collected close to the point of consumption using a random statistically reliable sampling rationale based on marketplace availability, origin of product, and time in transit and storage. Samples are prepared for analysis emulating consumer practices. This information, coupled with data gathered on post-harvest application of fungicides and growth regulators, provides a better representation of residues actually found on foods as consumed. Products collected in the 1998 Program are: 1) five fresh fruit and vegetable commodities--pears, sweet potatoes, strawberries, tomatoes, and winter squash (Oct.-Mar.); 2) three canned and/or frozen commodities--green beans, spinach, and winter squash (Apr.-Sept.); 3) juices--apple, grape, and orange; 4) two grain commodities--wheat and soybeans; 5) whole milk; and 6) a high fructose corn syrup survey. Program expansion to wheat, soybeans, and milk required the development of separate sampling systems and pesticide testing profiles for each commodity. In addition, at least 2 years of data were gathered for 13 other fresh commodities (apples, bananas, broccoli, carrots, celery, grapefruit, grapes, green beans, lettuce, oranges, peaches, potatoes, and spinach) and 1 to 2 years of data for 3 processed commodities (canned and/or frozen peaches, sweet peas, and sweet corn). As of January 1998, 31 commodities have been included in PDP's testing profile.

Samples of fresh fruits and vegetables are generally collected at locations such as terminal markets and large chain store distribution centers, while processed vegetable samples are available only at distribution centers. Wheat (representing all seven types) and soybean samples are chosen from GIPSA's file samples. These samples are collected from grain elevators/storage facilities based on individual State and monthly production, excluding product for export. Milk sampling is based on fluid milk production in 10 participating



**February 1998**

Although the U.S. food supply is one of the safest in the world, public concern still exists about the effects of agricultural pesticides on human health and environmental quality. Chemical residues on food have been of particular interest. Recognizing the need to improve the quality and quantity of information available on chemical residues, the U.S. Department of Agriculture (USDA) proposed the Pesticide Data Program (PDP) as part of its fiscal year 1991 budget. Program operations began in May 1991. PDP provides data on actual pesticide dietary exposure, food consumption, and pesticide usage, which help form the basis to conduct realistic dietary risk assessments and in evaluating pesticide tolerances. PDP is now a critical component of the Food Quality Protection Act (FQPA) of 1996. Title III of the Act directs the Secretary of Agriculture to provide improved pesticide residue data collection, including guidelines for the use of comparable analytical and standardized reporting methods and increased sampling for foods most highly consumed by infants and children.

PDP supports the Environmental Protection Agency's (EPA) risk assessment process in the reregistration of pesticides vital to American agriculture in sustaining a safe and abundant food supply. Other Government agencies use the data to respond more quickly and effectively to food safety issues. These data have also been used by USDA's Foreign Agricultural Service, State agencies, and grower groups to support the export of U.S. commodities in a competitive expanding global environment. PDP data are also used to examine pesticide residue issues which may affect good agricultural practices related to integrated pest management practices. PDP continues to amend the commodities and pesticides tested to further meet EPA's data needs and respond more fully to the 1993 National Academy of Sciences (NAS) report "Pesticides in the Diets of Infants and Children."

Coordination of PDP is multi-departmental with planning, policy, and procedural efforts conducted by USDA, EPA, and the Food and Drug Administration (FDA). USDA signed a Memorandum of Understanding with EPA and FDA to provide oversight and direction for PDP through an Executive Steering Committee.

- USDA**
- Collects data on agricultural chemical usage;
  - Collects pesticide residue data through cooperation with 10 participating States;
  - Provides EPA and FDA with data on food consumption;
  - Produces residue and usage data for EPA, FDA, and the public; and
  - Provides pesticide alternative practices.
- EPA**
- Coordinates with USDA on data collection for commodities and pesticides;
  - Receives pesticide residue, food consumption, and usage data from USDA, FDA, and State and private sources to support the pesticide reregistration process; and
  - Conducts dietary risk assessments.
- FDA**
- Shares residue data-recording information, commodity coding systems, and commodity preparation information with USDA;
  - Collects residue data to enforce EPA established tolerances and FDA administrative guidelines for food; and conducts total diet surveys.

## ■ **USDA Structure**

The four USDA agencies involved in PDP activities are the Agricultural Marketing Service (AMS), the Agricultural Research Service (ARS), the Economic Research Service (ERS), and the National Agricultural Statistics Service (NASS). AMS was selected as the lead agency to coordinate, implement, and manage the various facets of the program.



- 
- AMS**
    - Coordinates PDP activities of USDA agencies and cooperating State agencies;
    - Manages pesticide residue sampling and testing procedures;
    - Designs and maintains an automated information system for pesticide residue data; and
    - Publishes annual summaries of residue detections.
  - ARS**
    - Conducts nationwide surveys of food intake by individuals; and
    - Translates data on foods as consumed into forms linked to pesticide residue data.
  - ERS**
    - Analyzes NASS and AMS data to determine the impact various regulations and production practices might have on U.S. agricultural production, the Nation's food supply, and consumers; and
    - Assesses the economic implications of alternative pest control policies and practices on producers, marketers, and consumers.
  - NASS**
    - Conducts annual statistically reliable surveys of fruit and vegetable producers on fertilizer and pesticide use, relating to pest management and economic practices; and
    - Publishes annual State-level data on the results of the chemical use surveys, including percent of area receiving fertilizer and pesticides and total amounts applied.

## Program Status

### AMS

AMS has published pesticide residue summaries for 1991 through 1996. PDP pesticide monitoring activities are a Federal-State partnership where the 10 participating States, California, Colorado, Florida, Maryland (replacing North Carolina-Jan. 1997), Michigan, New York, Ohio, Texas, Washington, and Wisconsin, provide support services in collection and testing of commodities for pesticides using uniform national standard operating procedures (SOPs). Together, these States and States in their direct marketing network represent more than half the Nation's population, major agricultural States, and all regions of the country. This provides the basis for PDP's statistically reliable sampling rationale in projecting national estimates from the residue data. AMS also signed an agreement with USDA's Grain Inspection, Packers and Stockyards Administration (GIPSA) to collect and analyze grains.

PDP samples are collected close to the point of consumption using a random statistically reliable sampling rationale based on marketplace availability, origin of product, and time in transit and storage. Samples are prepared for analysis emulating consumer practices. This information, coupled with data gathered on post-harvest application of fungicides and growth regulators, provides a better representation of residues actually found on foods as consumed. Products collected in the 1998 Program are: 1) five fresh fruit and vegetable commodities--pears, sweet potatoes, strawberries, tomatoes, and winter squash (Oct.-Mar.); 2) three canned and/or frozen commodities--green beans, spinach, and winter squash (Apr.-Sept.); 3) juices--apple, grape, and orange; 4) two grain commodities--wheat and soybeans; 5) whole milk; and 6) a high fructose corn syrup survey. Program expansion to wheat, soybeans, and milk required the development of separate sampling systems and pesticide testing profiles for each commodity. In addition, at least 2 years of data were gathered for 13 other fresh commodities (apples, bananas, broccoli, carrots, celery, grapefruit, grapes, green beans, lettuce, oranges, peaches, potatoes, and spinach) and 1 to 2 years of data for 3 processed commodities (canned and/or frozen peaches, sweet peas, and sweet corn). As of January 1998, 31 commodities have been included in PDP's testing profile.

Samples of fresh fruits and vegetables are generally collected at locations such as terminal markets and large chain store distribution centers, while processed vegetable samples are available only at distribution centers. Wheat (representing all seven types) and soybean samples are chosen from GIPSA's file samples. These samples are collected from grain elevators/storage facilities based on individual State and monthly production, excluding product for export. Milk sampling is based on fluid milk production in 10 participating



---

States, as well as the annual production of each processing plant. Corn syrup samples are provided through the National Corn Refiners Association and its membership. Another critical aspect of PDP is the ability to generate comparative data between fresh and processed products, sometimes representing different markets.

Laboratory operations are designed to detect, verify, and report low-level pesticide concentrations. Participating laboratories use advanced technologies, uniform laboratory procedures, and an effective quality assurance program based on EPA's Good Laboratory Practices. Laboratories verify residue detections and participate in PDP's Proficiency Testing Program. Periodic audits of sampling and laboratory operations are conducted to ensure compliance with PDP SOPs.

State laboratories and GIPSA perform analyses for organochlorine, organophosphate, organonitrogen, organosulfur, and N-methyl carbamate classes of pesticides. Depending upon the commodity, specific analyses for 2,4-D, abamectin, benomyl, formetanate, and fenbutatin oxide are performed by Federal laboratories (AMS Eastern, Gastonia, NC, and APHIS NMRAL, Gulfport, MS) and selected State laboratories. The pesticides routinely monitored by PDP are those identified by EPA as needing more refined data for realistic dietary risk assessments. Presently, more than 100 pesticides, isomers, metabolites, and analogs are included in the fruit and vegetables, wheat, soybeans, milk, and corn syrup testing programs. These pesticides include insecticides, fungicides, herbicides, and growth regulators.

The Program designed an extensive, automated database management system, which provides a central repository for the pesticide residue data, where data is electronically transferred from the participating laboratories directly to the PDP database. PDP also has the capability to conduct customized data queries.

## ARS

ARS completed the Continuing Survey of Food Intakes by Individuals (CSFII 1994-96), which sampled over 16,000 individuals of all ages. A special supplemental survey ending December 1998 will provide an increased sample of 5,000 children ages 0-9 years. Micro data for the CSFII 1994-96 surveys are available on CD-ROM and magnetic tape. Summary data are available on the Internet at <http://www.barc.usda.gov/bhnrc/foodsurvey/home.htm>. ARS is working with EPA to translate CSFII data into commodity consumption profiles for dietary risk assessment studies.

## ERS

ERS has published several reports analyzing results of the Pesticide Data Program, which include: 1) Economic Issues Associated with Food Safety, Food and Consumer Economic Division, Staff Paper Number AGES 9606; 2) Pesticide Residues: Reducing Dietary Risks, Agricultural Economic Report No. 728; 3) "Pesticide Residues and Food Safety" in Agricultural Resources and Environmental Indicators [AREI], Agricultural Handbook No. 705; 4) Pesticide Use and Trends in U.S. Agriculture, Agricultural Economic Report No. 717; 5) Pest Management of Major Field Crops in 1994, AREI No.19, 1995; 6) Organic Vegetable Growers Surveyed in 1994, AREI Update No. 4, 1996; and 7) The Extent of Integrated Pest Management in U.S. Agriculture, Agriculture Information Bulletin No. 707.

## NASS

NASS has published several surveys related to PDP activities: 1) Fruits and Nuts Chemical Use Survey in 14 Major Producing States, 1991 crop year; 2) Vegetable Chemical Use Survey in 14 Major Producing States, 1992 crop year; 3) Fruit Chemical Use Survey in 9 Major Producing States, 1993 crop year; 4) Vegetable Chemical Use Survey in 14 Major Producing States, 1994 crop year; 5) Fruit Chemical Use Survey in 9 Major Producing States, 1995 crop year; and 6) Vegetable Chemical Use Survey in 14 Major Producing States, 1996.



---

## ■ Summary of Pesticide Residue Data for Calendar Year 1996

A total of 5,771 samples were collected and analyzed in 1996 (fruit and vegetables, 4,856; milk, 575; and wheat, 340). Pesticides detected included insecticides, herbicides, fungicides, and growth regulators. DDT and its metabolites were detected in some commodities, primarily carrots and spinach due to environmental contamination and not as a result of prohibited crop application. About 72 percent of the fruit and vegetable samples, 18 percent of the milk, and 91 percent of the wheat samples tested had at least one pesticide residue. Post-harvest applications accounted for 20 percent of the residue detections. For fruit and vegetables, 67 different pesticide residues were detected, 4 were detected in milk, and 16 were detected in wheat.

Approximately 89 percent of samples tested were domestic, and 11 percent were imported (0.2 percent were of unknown origin). Four percent of all samples tested, 198 samples, were reported as presumptive tolerance violations. All were in fruit and vegetables, except for one wheat and one milk sample. Most of these were for residues where no tolerance was established. Residues of pesticides, when found on the tested foods, were generally below tolerance levels. This is to be expected because of the dissipation of residues between the farm and marketplace and the standard food preparation techniques applied prior to testing.

## ■ Program Synopsis

PDP provides EPA with statistically reliable pesticide data at verifiable limits of detection and known quality. PDP has: 1) periodically altered the residue testing profile and pesticide use surveys to meet the needs of EPA as requested for compounds requiring more refined data; 2) responded to issues confronting the Government that involve the quality and scope of pesticide residue data as stated in FQPA and by NAS ; 3) modified its information system to meet the varying needs of data users; 4) supported the export of U.S. commodities in a competitive global market; and (5) provided information on pesticide residue in food to support integrated pest management objectives. USDA is confident this program is generating the data needed for making decisions on food safety issues and addressing public perceptions concerning the safety of the Nation's food supply.

## ■ Information

PDP's Internet address is <http://www.ams.usda.gov/science/pdp/index.htm>. For further information contact William J. Franks, Jr., Deputy Administrator, AMS Science and Technology: (202) 720-5231, facsimile (202) 720-6496; or Robert L. Epstein, Associate Deputy Administrator: (202) 720-2158, facsimile (202) 720-1484. For Progress Report or PDP Summary copies contact the PDP staff at (703) 330-2300, facsimile (703) 369-0678. Electronic mail may be sent to [William\\_J\\_Franks@usda.gov](mailto:William_J_Franks@usda.gov) or [Robert\\_L\\_Epstein@usda.gov](mailto:Robert_L_Epstein@usda.gov). For more information on food consumption surveys, contact Alanna Moshfegh at ARS (301) 734-8457, facsimile (301) 734-5496; on pesticide use surveys contact Sam Rives at NASS (202) 720-2248, facsimile (202) 720-6396; and on pesticide alternative issues contact Stephen Crutchfield at ERS (202) 694-5460.



The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, DC 20250, or call (800) 245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.



---

States, as well as the annual production of each processing plant. Corn syrup samples are provided through the National Corn Refiners Association and its membership. Another critical aspect of PDP is the ability to generate comparative data between fresh and processed products, sometimes representing different markets.

Laboratory operations are designed to detect, verify, and report low-level pesticide concentrations. Participating laboratories use advanced technologies, uniform laboratory procedures, and an effective quality assurance program based on EPA's Good Laboratory Practices. Laboratories verify residue detections and participate in PDP's Proficiency Testing Program. Periodic audits of sampling and laboratory operations are conducted to ensure compliance with PDP SOPs.

State laboratories and GIPSA perform analyses for organochlorine, organophosphate, organonitrogen, organosulfur, and N-methyl carbamate classes of pesticides. Depending upon the commodity, specific analyses for 2,4-D, abamectin, benomyl, formetanate, and fenbutatin oxide are performed by Federal laboratories (AMS Eastern, Gastonia, NC, and APHIS NMRAL, Gulfport, MS) and selected State laboratories. The pesticides routinely monitored by PDP are those identified by EPA as needing more refined data for realistic dietary risk assessments. Presently, more than 100 pesticides, isomers, metabolites, and analogs are included in the fruit and vegetables, wheat, soybeans, milk, and corn syrup testing programs. These pesticides include insecticides, fungicides, herbicides, and growth regulators.

The Program designed an extensive, automated database management system, which provides a central repository for the pesticide residue data, where data is electronically transferred from the participating laboratories directly to the PDP database. PDP also has the capability to conduct customized data queries.

## ARS

ARS completed the Continuing Survey of Food Intakes by Individuals (CSFII 1994-96), which sampled over 16,000 individuals of all ages. A special supplemental survey ending December 1998 will provide an increased sample of 5,000 children ages 0-9 years. Micro data for the CSFII 1994-96 surveys are available on CD-ROM and magnetic tape. Summary data are available on the Internet at <http://www.barc.usda.gov/bhnrc/foodsurvey/home.htm>. ARS is working with EPA to translate CSFII data into commodity consumption profiles for dietary risk assessment studies.

## ERS

ERS has published several reports analyzing results of the Pesticide Data Program, which include: 1) Economic Issues Associated with Food Safety, Food and Consumer Economic Division, Staff Paper Number AGES 9606; 2) Pesticide Residues: Reducing Dietary Risks, Agricultural Economic Report No. 728; 3) "Pesticide Residues and Food Safety" in Agricultural Resources and Environmental Indicators [AREI], Agricultural Handbook No. 705; 4) Pesticide Use and Trends in U.S. Agriculture, Agricultural Economic Report No. 717; 5) Pest Management of Major Field Crops in 1994, AREI No.19, 1995; 6) Organic Vegetable Growers Surveyed in 1994, AREI Update No. 4, 1996; and 7) The Extent of Integrated Pest Management in U.S. Agriculture, Agriculture Information Bulletin No. 707.

## NASS

NASS has published several surveys related to PDP activities: 1) Fruits and Nuts Chemical Use Survey in 14 Major Producing States, 1991 crop year; 2) Vegetable Chemical Use Survey in 14 Major Producing States, 1992 crop year; 3) Fruit Chemical Use Survey in 9 Major Producing States, 1993 crop year; 4) Vegetable Chemical Use Survey in 14 Major Producing States, 1994 crop year; 5) Fruit Chemical Use Survey in 9 Major Producing States, 1995 crop year; and 6) Vegetable Chemical Use Survey in 14 Major Producing States, 1996.





## ■ Summary of Pesticide Residue Data for Calendar Year 1996

A total of 5,771 samples were collected and analyzed in 1996 (fruit and vegetables, 4,856; milk, 575; and wheat, 340). Pesticides detected included insecticides, herbicides, fungicides, and growth regulators. DDT and its metabolites were detected in some commodities, primarily carrots and spinach due to environmental contamination and not as a result of prohibited crop application. About 72 percent of the fruit and vegetable samples, 18 percent of the milk, and 91 percent of the wheat samples tested had at least one pesticide residue. Post-harvest applications accounted for 20 percent of the residue detections. For fruit and vegetables, 67 different pesticide residues were detected, 4 were detected in milk, and 16 were detected in wheat.

Approximately 89 percent of samples tested were domestic, and 11 percent were imported (0.2 percent were of unknown origin). Four percent of all samples tested, 198 samples, were reported as presumptive tolerance violations. All were in fruit and vegetables, except for one wheat and one milk sample. Most of these were for residues where no tolerance was established. Residues of pesticides, when found on the tested foods, were generally below tolerance levels. This is to be expected because of the dissipation of residues between the farm and marketplace and the standard food preparation techniques applied prior to testing.

## ■ Program Synopsis

PDP provides EPA with statistically reliable pesticide data at verifiable limits of detection and known quality. PDP has: 1) periodically altered the residue testing profile and pesticide use surveys to meet the needs of EPA as requested for compounds requiring more refined data; 2) responded to issues confronting the Government that involve the quality and scope of pesticide residue data as stated in FQPA and by NAS; 3) modified its information system to meet the varying needs of data users; 4) supported the export of U.S. commodities in a competitive global market; and (5) provided information on pesticide residue in food to support integrated pest management objectives. USDA is confident this program is generating the data needed for making decisions on food safety issues and addressing public perceptions concerning the safety of the Nation's food supply.

## ■ Information

PDP's Internet address is <http://www.ams.usda.gov/science/pdp/index.htm>. For further information contact William J. Franks, Jr., Deputy Administrator, AMS Science and Technology: (202) 720-5231, facsimile (202) 720-6496; or Robert L. Epstein, Associate Deputy Administrator: (202) 720-2158, facsimile (202) 720-1484. For Progress Report or PDP Summary copies contact the PDP staff at (703) 330-2300, facsimile (703) 369-0678. Electronic mail may be sent to [William\\_J\\_Franks@usda.gov](mailto:William_J_Franks@usda.gov) or [Robert\\_L\\_Epstein@usda.gov](mailto:Robert_L_Epstein@usda.gov). For more information on food consumption surveys, contact Alanna Moshfegh at ARS (301) 734-8457, facsimile (301) 734-5496; on pesticide use surveys contact Sam Rives at NASS (202) 720-2248, facsimile (202) 720-6396; and on pesticide alternative issues contact Stephen Crutchfield at ERS (202) 694-5460.



The U.S. Department of Agriculture (USDA) prohibits discrimination in its programs on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, and marital or familial status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint, write the Secretary of Agriculture, U.S. Department of Agriculture, Washington, DC 20250, or call (800) 245-6340 (voice) or (202) 720-1127 (TDD). USDA is an equal employment opportunity employer.